Orana Regional Organisation of Councils
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8th August 2014

Mr John Skinner
Director
Network Regulation
Australian Energy Regulator
Level 20
175 Pitt Street
SYDNEY NSW 2000

(via email to NSWACTelectricity@aer.gov.au)

Dear Mr Skinner,

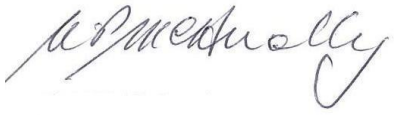
Thank you for the opportunity to provide feedback to Essential Energy's Public Lighting Proposal for the regulatory period 2015 – 2019.

The Orana Regional Organisations of Councils (OROC) comprises twelve local government areas including Bogan, Bourke, Brewarrina, Cobar, Coonamble, Gilgandra, Narromine, Walgett, Warren, Warrumbungle, Wellington and Dubbo City Councils.

These councils are located in the Central West, North West and Far West sectors of NSW covering an area over 190,000 square kilometres or 20% of the geographical area of NSW and are all clients of Essential Energy.

OROC members welcome the opportunity to discuss our concerns further with you if the opportunity does arise.

Yours faithfully,



Clr Bill McAnally
Chair
Orana Regional Organisation of Councils

Enc.

SUBMISSION PREPARED FOR
NSW LOCAL COUNCILS

IN RELATION TO

ESSENTIAL ENERGY'S PUBLIC LIGHTING PROPOSAL
FOR THE
REGULATORY PERIOD COMMENCING 2015/16
SPECIFICALLY
APPENDICES 8.1, 8.2 AND 8.3

Prepared by

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August 2014

1. ENGAGEMENT

Energy and Management Services Pty Ltd (EMS) are engaged by the Local Councils listed below to respond collectively to the proposal submitted by Essential Energy in relation to public lighting. Specifically we refer to Appendices 8.1, 8.2 and 8.3 of Essential Energy's Regulatory Proposal, submitted to the AER on 31 May 2014.

Clients for whom this submission is prepared:

Orana Regional Organisation of Councils (OROC) which encompasses the following local Councils:

- Bogan
- Bourke
- Brewarrina
- Cobar
- Coonamble
- Dubbo
- Gilgandra
- Narromine
- Walgett
- Warren
- Warrumbungle
- Wellington

Namoi Regional Organisation of Councils (NamoiROC) which encompasses the following local Councils:

- Gunnedah
- Liverpool Plains
- Narrabri
- Tamworth Regional
- Uralla
- Walcha

Armidale Dumaresq Council

Mid-Western Regional Council

As can be seen from the map below, these Councils cover a large portion of rural NSW.

Disclaimer

The analysis, findings, conclusions and recommendations and all written material contained in this Report represent the best professional judgement of Energy and Management Services Pty Ltd (EMS), based on the information made available.

In preparing the Report, EMS has relied upon information provided by the Client and others. Whilst this information has been reviewed to assess its reasonableness and internal consistency, EMS does not warrant the accuracy of any information so provided.

2. CONTESTABILITY OF PUBLIC LIGHTING INSTALLATION AND MAINTENANCE WORK

We have reviewed Essential Energy's costing model at a high level and, given the restricted time available, we are unable to verify that all of the cost input data and assumptions are correct. We will, however, show in Section 7 of this report a number of issues that we believe Essential Energy have not estimated correctly which could materially affect the outcome of their model.

It appears to us that Essential Energy have made some assumptions which we consider are not appropriate. These will be addressed in the following Sections.

In previous dealings with Essential Energy there appears to be an assumption on their part that Local Councils are beholden to them for all installation and maintenance work. We would argue that public lighting is an alternative control service and is contestable.

It is acknowledged that the AER currently considers that public lighting is a non-contestable monopoly of the NSW electricity distributors. Our clients consider that this is an inappropriate assumption as in NSW, it is clearly a contestable service as demonstrated by the provisions of the Department of Trade and Investment *Accreditation of Service Providers to Undertake Contestable Services – Level 1,* March 2104, Section 6.1[1]. This document is attached as an Appendix. In NSW, Level 1 Accredited Service Providers (ASPs) are qualified to install and maintain public lighting. This is a contestable service and Essential Energy has no grounds to claim exclusivity for its provision of such services.

In view of the extraordinary increase in costs contained within the proposal, especially affecting smaller rural Councils, it may be anticipated that during the course of the next regulatory period, Councils will start to move away from using Essential Energy to provide both installation and maintenance services.

[1] Available at www.resourcesandenergy.nsw.gov.au/__data/assets/pdf_file/0007/506185/level-1-asp-rules-for-accreditation.pdf

3. RESPONSIBILITY FOR PUBLIC LIGHTING COMPLIANCE

Notwithstanding Essential Energy's viewpoint, the customer (that is, the respective Local Council) is responsible for the installation and maintenance of public lighting such that compliance with appropriate standards is maintained.

Our clients dispute Essential Energy's assumption that they are responsible and can dictate the type and form of lighting provided.

Public lighting is a contestable service and Councils must have the right to determine the types of lighting installed and the method of maintaining those lights.

4. BULK REPLACEMENT CYCLES

It is argued that the proposed change from a four year cycle for bulk replacements to a three year cycle is inappropriate in terms of both luminaire performance and unnecessary environmental waste. Figure 4-1 shows a performance curve for high pressure sodium (HPS) lamps.

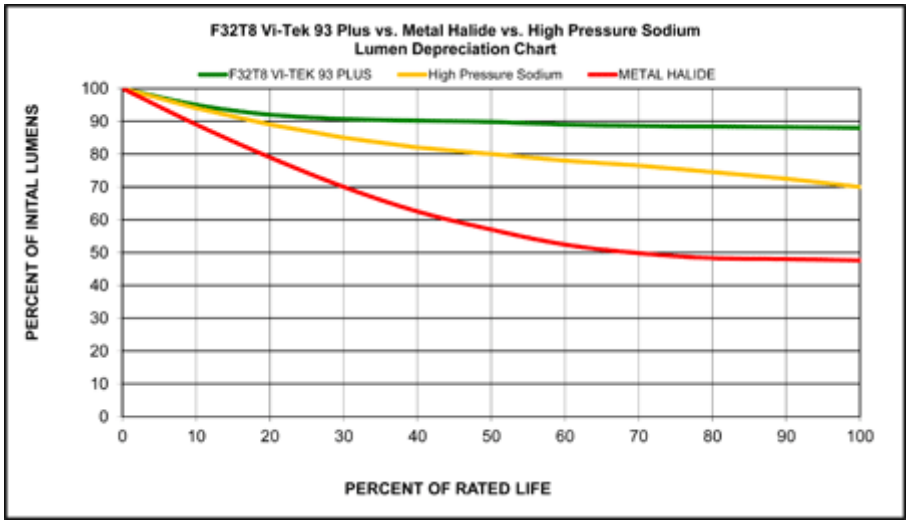

Figure 4-1 Typical HPS Lamp Lumen Performance

The life of HPS lamps is usually taken to be 20,000 to 25,000 hours. This is equal to 4.5 to 5.5 years of 12 hours burning per day, 365 days a year. It will be seen that over that life, the light output drops to only 70% of the initial output.

Compliant public lighting design must take into account the lamp output deterioration. Accordingly, the design (lamp wattage, pole spacing, etc.) is normally based on an assumed 90% output. Compliant public lighting design should be based on this assumption, especially in the design of Type V public lighting for vehicular traffic.

The other aspect of a three year bulk replacement program is that it results in the unnecessary disposal of many good lamps, each of which contains sodium and mercury. This creates an excessive and largely avoidable environmental hazard.

We argue that the bulk replacement cycle, rather than being shortened to 3 years, should be reanalysed using full life cycle costs with a view to extending the cycle rather than shortening the cycle.

We further argue that the decision should rest with the customer, the body responsible for public lighting, rather than the service provider.

5. TRANSFER OF ASSETS

It is understood from Appendix 8.1 that Essential Energy intends to base their SLOUS charges on five tariff rates as shown in Table 5-1[2].

Table 5-1 Essential Energy Proposed SLOUS Tariffs

Tariff	Install Date	Capital Provision	Maintenance Responsibility	Replacement Responsibility
Rate 1	<= June 2009	Essential Energy	Essential Energy	Negotiable
Rate 2	<= June 2009	Customer	Essential Energy	Essential Energy
Rate 3	> June 2009 <= June 2015	Essential Energy	Essential Energy	Negotiable
Rate 4	> June 2009 <= June 2015	Customer	Essential Energy	Negotiable
Rate 5	> June 2015 <= June 2019	Essential Energy	Essential Energy	Negotiable
Rate 99	Was Tariff 6	Customer	Customer	Negotiable

We question the basis on which Essential Energy claim to have maintenance responsibility for all public lighting under Tariffs 1 to 5. As an alternative control service this is a contestable service and in NSW may be undertaken by any Level 1 ASP.

The NSW Public Lighting Code requires the service provider and the customer to negotiate in good faith with regard to these matters.

It will be the intention of our clients to explore the transfer of public lighting assets under Rates 1 and 3 back to the respective customer together with a sum to cover already funded depreciation of those assets. Any values that in the customers' viewpoint seem to be unreasonable will be referred to the AER for a ruling based on the regulated assets base procedures applicable to the Determination.

It is our clients' view that Essential Energy cannot claim responsibility for maintenance without consultation and agreement. This is a contestable service.

Our clients wish to have the option to engage suitably qualified local contractors to install any public lighting asset post June 2015. The intention is to avoid Essential Energy's rates. The engagement of local service providers will support local employment and keep the economic benefit in the local community.

[2] Essential Energy, *Regulatory Proposal to AER, 31 May 2014, Appendix 8.1, Table 7.*

6. INSTALLATION AND MAINTENANCE SERVICES BY LOCAL QUALIFIED CONTRACTORS

Our clients intend to seek quotations from local Level 1 ASPs. It is anticipated such quotations will be less than Essential Energy's cost-recovery charges.

Our clients want the option to engage local qualified contractors wherever possible. This matter should be for decision by the customer. Essential Energy's attempts to force their services on to our clients will be disputed.

7. OTHER MATTERS

a) INAPPROPRIATE CONFIDENTIALITY

It is noted that Essential Energy have sought to classify their Appendix 8.1 as confidential. There is nothing in the Appendix which could be claimed to be confidential – it should be provided as public information. Our clients suspect that Essential Energy is seeking to hide their approach to the matter behind an unjustifiable cloak of confidentiality.

In this matter, we support and endorse the comments of Mr Alan Northey, General Manager of SSROC, submitted to the AER on 28 July 2014.

b) DELAYED RELEASE OF PROPOSAL

It is noted that Essential Energy waited until mid-July to advise their public lighting customers of their intention to greatly increase the public lighting charges. This provided just three weeks lead time to make a submission to the AER. In view of the fact that their Regulatory Submission was lodged on 31 May 2014, our clients suspect that Essential Energy have sought to make it difficult for our clients to respond meaningfully to the AER.

Accordingly, we seek the AER's consent to provide a more detailed submission when additional information is to hand relating to the comparative costs of Essential Energy's services and local service provision.

c) POSSIBLE DOUBLE COUNTING

It is noted that Essential Energy have included pole maintenance in their determination of costs. Although these charges appear only to apply where a wood pole (or steel standard) is used exclusively for the support of a public light, it is unclear how these costs are isolated from general pole maintenance costs included in the regulatory charges associated with the Network Use of System charge (BLNP1AO, BLNP3AO). Our clients would like to be assured that there is no inadvertent "double counting" of pole maintenance costs. We ask the AER to carefully investigate this possibility.

More detailed information is needed from Essential Energy to establish the boundary between SLOUS and NUOS charges so that items such as pole maintenance which are applicable to both can be clearly shown to be accurately recorded.

d) FAILURE RATE OF HPS LAMPS

We note that Essential Energy have based their maintenance costs of high pressure sodium (HPS) lamps on an assumed failure rate of 14%. This is an extraordinary percentage and we would have expected this to give rise to a thorough investigation into procurement standards and review. We request the AER to require Essential Energy to publish the data upon which this rate is based. The significant attribute of HPS lamps is that they have greater efficiency and a much longer life than mercury vapour (MV) lamps. Despite this, Essential Energy's failure rate for MV lamps is only 4%. It is unacceptable to simply accept this apparent anomaly without further investigation.

e) MAINTENANCE APPROACH

The data suggests that there were delays to the planned commencement dates for Essential Energy's bulk lamp replacement (BLR) program in some areas. In other areas, the program has not yet been implemented. The data also suggests that the BLR program has not been repeated on an appropriate cycle in some regions. It is possible that the interaction between the actual BLR roll out and spot maintenance data has not been properly interpreted.

f) MAINTENANCE PRODUCTIVITY

The information provided to date suggests Essential Energy may be making some poor decisions about how it organises maintenance.

For example the reported defects per depot per mobilisation indicate that for many smaller Council areas a crew is despatched for only 1 to 2 tasks on average. This is reinforced by statistics showing that 31% of reported failures are fixed on the same day. Clearly this is not conducive to cost effective management and we query whether this data includes tasks other than lighting e.g. pole and wire maintenance. Surely a crew despatched to do pole and wire maintenance would also have the skill and equipment to conduct street lighting maintenance in the vicinity or on the way to or from that other task.

More information is required to conduct a thorough analysis of maintenance productivity.

g) BULK CFL ROLLOUT

We point out that Essential Energy commenced a rollout of compact fluorescent lamps (CFL) replacements after Ausgrid suspended its own CFL rollout due to high faults. We are aware that Essential Energy was advised by Ausgrid that they were discontinuing the deployment of CFL technology due to high failure rates and yet Essential Energy continued the program against such advice. In some cases Councils also queried the wisdom of choosing a relatively old technology when LED technology is rapidly maturing into a viable and more attractive option.

Ausgrid have now committed to replace the troublesome CFLs with Sylvania LEDs yet Essential Energy continue to install CFLs.

h) LED Delays

It is noted that Ausgrid, Endeavour Energy and Essential Energy have the same Chief Executive Officer, are governed by the same Board and yet have adopted diametrically opposed positions on LEDs. Essential Energy is still delaying the implementation of an LED conversion policy even though the technology is now mature and, with appropriate procurement safeguards, a viable option. Essential Energy's position stands in contrast to other utilities. Rural Councils would have the most to gain from LED reliability benefits through energy efficiency and maintenance cost reductions. It is difficult to understand why Essential Energy is continuing with old technology.

i) COST DIFFERENCES

The available data is unclear on whether Essential Energy is charging reasonable costs in relation to public lighting maintenance. Once again, the paucity of data and the limited time for the preparation of this submission have worked against us in making a detailed submission.

Some of the other issues raised would have significant impact on costs so the emphasis is not on challenging current costs, but on current practices.

Again we ask the AER to require Essential Energy to provide more and better data and to allow us more time to analyse the data and make a further detailed submission.

j) PUBLIC PERCEPTION

There has been consistent feedback regarding dissatisfaction with the standard of public lighting and particularly with regard to the number of lights not operational. The statistics appear to suggest that whilst Essential Energy is concentrating efforts on rectifying reported faults quickly, perhaps overly so in some cases, the issue may be the time between a light failure and the date of reporting that failure.

Relying solely on public response is clearly not sufficient. It is possible the balance between regular patrols and efficiency of repair programs may need to be reconsidered. That said, a reduction in failure rates by whatever means, would be a much superior outcome.

k) PUBLIC LIGHTING CODE

The NSW Public Lighting Code[3] is the reference point for public lighting service levels in New South Wales. Advice from our clients indicates that Essential Energy has not consistently achieved the service levels required by the Code.

The NSW Public Lighting Code is designed to help clarify the relationship between Public Lighting Service Providers and Public Lighting Customers. In particular, it sets out:

- Minimum maintenance standards and associated service level guarantees
- Minimum requirements for inventories, management plans, performance reporting and billing
- A requirement that Service Providers consult with Customers in deciding which core lighting types they are going to offer.
- A mechanism allowing for connection of lighting types outside the core choices offered by Service Providers.

The objectives of Essential Energy's Public Lighting Plan 2010 in providing public lighting are to:

[3] NSW Dept. of Energy, Utilities and Sustainability, *NSW Public Lighting Code,* 1 January 2006. Available at: http://www.resourcesandenergy.nsw.gov.au/energy-supply-industry/legislation-and-policy/electricity-legislation/code-review/electricity_legislation_nsw_public_lighting_code.pdf

- Meet customer and local community needs for effective lighting, reliability, energy efficiency and environmental performance.
- Maintain a safe public lighting system that is compliant with AS/NZS 1158.
- Fulfil regulatory requirements as well as those of Industry and Investment NSW, including those established in the NSW Public Lighting Code.
- Minimise the costs to Essential Energy and our customers.

The management plan applies to all public lighting in the Essential Energy distribution area and provides a common approach to the management of public lighting. The plan does not apply to security lighting, decorative lighting or other special purpose lighting.

It is noted that the Essential Energy documents stated objectives make no mention of the Public Lighting Codes requirement for "consulting with Customers in deciding which core lighting types they are going to offer". It is the Councils' opinion that Essential Energy have provided little or no consultation in the selection of street lighting technology and in fact have repeatedly ignored requests by Councils to provide more efficient and more reliable technology. For example, in 2012 Tamworth Council unsuccessfully requested that Essential Energy reconsider the CFL bulk replacement plan as it was known at that time that Ausgrid had experienced poor reliability from CFLs. It appears that the request was ignored.

Similarly, Councils would argue that Essential Energy has failed to adequately provide the fourth dot point in the Public Lighting Code objectives: viz. "A mechanism allowing for connection of lighting types outside the core choices offered by Service Providers".

The Essential Energy Management Plan lists a host of impediments for Councils considering the option of choosing Tariff Rate 6 (or Tariff 99 as Essential Energy propose to rename it). Notwithstanding these impediments, local Councils now have a strong incentive to explore this path. Those that have are met with little or no assistance from Essential Energy.

The Essential Energy Public Lighting Management Plan states that Essential Energy will provide the customer (Council) with an Annual Performance Report in July of each year that includes:

- A Letter
- Annual Performance Report
- CD of data
- an inventory report including:
  - Lamp type
  - Wattage rating
  - Support details
  - Control mechanism
  - Tariff information.

It is noted Essential Energy often provides information such as the annual performance report to Councils in pdf format rather than spreadsheets. This makes statistical analysis of 40 or more pages of individual street light response times virtually impossible.

I) FINANCIAL HARDSHIP

A report commissioned by OROC in late 2013 into street lighting in OROCs area, found that in a typical small Council, for example Warren Shire Council (WSC):

1. In the 2012 calendar year street lighting cost WSC $84,430 which represented 30.4% of the total Council energy bill of $277,434.

2. The energy consumption for street lighting was 346,188 kWh which was 17.2% of the total energy consumption of 2,010,114 kWh.

3. The proposed cost increase for the OROC councils is much more than 62% as reported as the average in the Essential Energy Proposal Executive Summary. The table below shows the increase from actual 2013 to proposed 2015 prices is 100% and the increase in the Opex cost is between 99% and 121%. Essential Energy's reported average is skewed by Councils that have very low levels of ownership and therefore low Capex increases. This skewing masks the dramatic increases in Opex for all Councils.

Council	No. STL	2013 Actual	2015 Capex	2015 Proposed Opex	Total	Total Variance	% total Increase	Opex variance	Opex increase %
Bogan	445	$ 19,582	$ 211	$ 41,432	$ 41,643	$ 22,061	113%	$ 21,639	112%
Bourke	526	$ 37,736	$ 15,840	$ 47,392	$ 63,232	$ 25,496	68%	$ 25,496	116%
Brewarrina	219	$ 13,408	$ 3,989	$ 19,361	$ 23,350	$ 9,942	74%	$ 9,942	106%
Cobar	752	$ 34,809	$ 2,494	$ 71,048	$ 73,542	$ 38,733	111%	$ 38,733	120%
Coonamble	522	$ 24,476	$ 952	$ 51,016	$ 51,968	$ 27,492	112%	$ 27,492	117%
Dubbo	4,878	$ 248,160	$ 23,091	$ 476,158	$ 499,249	$ 251,089	101%	$ 251,089	112%
Gilgandra	562	$ 26,635	$ 1,194	$ 55,286	$ 56,480	$ 29,845	112%	$ 29,845	117%
Narromine	774	$ 33,678	$ 398	$ 74,360	$ 74,758	$ 41,080	122%	$ 41,080	123%
Walgett	871	$ 53,432	$ 16,593	$ 73,228	$ 89,821	$ 36,389	68%	$ 36,389	99%
Warren	388	$ 21,155	$ 2,077	$ 38,009	$ 40,086	$ 18,931	89%	$ 18,931	99%
Warrumbungle	747	$ 31,094	$ 615	$ 67,332	$ 67,947	$ 36,853	119%	$ 36,853	121%
Wellington	1,206	$ 48,709	$ 139	$ 105,953	$ 106,092	$ 57,383	118%	$ 57,383	118%
Total	11,890	$ 592,874	$ 67,593	$ 1,120,575	$ 1,188,168	$ 595,294	100%	$ 594,872	113%

4. Compared to Ausgrid and Endeavour Energy, Essential Energy have higher street lighting NUOS network charges on average because they charge on a time of use rather than a flat rate. The following table shows the regional and rural Councils are

already paying 28% higher than city counterparts. This begs the question of whether clearly non-contestable NUOS charges could be utilised to cover the cost of potentially contestable SLUOS charges.

Council	No. STL	2013 Actual $	2015 Capex $	2015 Proposed Opex $	Total $	Total Variance $	% total Increase	Opex variance $	Opex increase %
Bogan	445	19,582	211	41,432	41,643	22,061	113%	21,639	112%
Bourke	526	37,736	15,840	47,392	63,232	25,496	68%	25,496	116%
Brewarrina	219	13,408	3,989	19,361	23,350	9,942	74%	9,942	106%
Cobar	752	34,809	2,494	71,048	73,542	38,733	111%	38,733	120%
Coonamble	522	24,476	952	51,016	51,968	27,492	112%	27,492	117%
Dubbo	4,878	248,160	23,091	476,158	499,249	251,089	101%	251,089	112%
Gilgandra	562	26,635	1,194	55,286	56,480	29,845	112%	29,845	117%
Narromine	774	33,678	398	74,360	74,758	41,080	122%	41,080	123%
Walgett	871	53,432	16,593	73,228	89,821	36,389	68%	36,389	99%
Warren	388	21,155	2,077	38,009	40,086	18,931	89%	18,931	99%
Warrumbungle	747	31,094	615	67,332	67,947	36,853	119%	36,853	121%
Wellington	1,206	48,709	139	105,953	106,092	57,383	118%	57,383	118%
Total	11,890	592,874	67,593	1,120,575	1,188,168	595,294	100%	594,872	113%

NUOS	Essential Energy	Ausgrid	Endeavour Energy	Assumed TOU split
Access (c/day)	1.1868	0	0	
Flat rate (c/kWh)	23.855	8.9533	9.2194	
TOU NUOS				
Access (c/day)	0			
Peak	22.9853			8.2%
Shoulder	22.9853			11.4%
Off peak	9.8957			80.3%
Average (c/kWh)	12.4514	8.9533	9.2194	
Discount to EE price		28%	26%	

To summarise, Councils believe they are already paying Essential Energy too much for street lighting (both SLUOS and NUOS charges) and cannot sustain a 100% increase in opex charges nor can they justify such an impost on their respective ratepayers.

8. CONCLUSION

To summarise the main points of this submission:

- In NSW public lighting work, both installation and maintenance may be undertaken by any Level 1 accredited service provider, therefore all aspects of public lighting work are contestable.

- The AER's view that public lighting is a monopoly service of the DNSPs is disputed in light of the provisions of the NSW Public Lighting Code and the authorisation of Level 1 accredited service providers.

- The choice of lamp type, lighting design, and maintenance standards rests with the customer, not the service provider.

- Essential Energy's unilateral decision to reduce its bulk lamp replacement cycles from 4 years to 3 years is inappropriate, excessively expensive, and creates an unnecessary environmental hazard.

- It will be the local Council's intention to transfer Rate 1 and 3 public lighting back to Council ownership at AER determined depreciated values.

- Local Councils will seek to engage local Level 1 ASPs to undertake both installation and maintenance works on public lighting.

- Several matters in the Essential Energy Regulatory Proposal have given rise to concern. These include:
    - Inappropriate confidentiality
    - Delayed release of their proposal
    - Possible double counting of pole maintenance
    - Failure rate of HPS lamps unsupported by data
    - Inefficient maintenance practices
    - Bulk CFL roll-out despite established data on the unreliability of CFL lamps
    - A reluctance to adopt LED technology despite established data on LED reliability and efficiency
    - Insufficient access to data to verify Essential Energy's claims regarding costs
    - Poor public perception of Essential Energy's public lighting maintenance
    - Essential Energy's sub-standard compliance with the NSW Public Lighting Code
    - The fact that the greatest cost increases are borne by those Councils least able to afford them, and
    - The unjustified cost impost on local residents.

APPENDICES

1. NSW Department of Trade and Investment *Accreditation of Service Providers to Undertake Contestable Services – Level 1* March 2104

   Please see the attached file. Attention is drawn to Section 6.1.

2. NSW Government, *Public Lighting Code*, January 2006

   Please see attached file.